

surface of the second supporting substrate extends to one of the first or second end of the second substrate but not the other of the first or second end of the second substrate;

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a PTC element having a first end and a second end and comprised of a polymer having conductive particles dispersed therein, the PTC element positioned between the first and second supporting substrates and electrically connected to the electrodes, the electrode disposed on the first surface of the first supporting substrate extends to one of the first or second end of the PTC element but not the other of the first or second end of the PTC element, the electrode disposed on the first surface of the second supporting substrate extends to one of the first or second end of the PTC element but not the other of the first or second end of the PTC element;

a first electrically conductive end termination wrapping around the first end of the PTC element and electrically contacting the electrode disposed on the first substrate; and

a second electrically conductive end termination wrapping around the second end of the PTC element and electrically contacting the electrode disposed on the second substrate.

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16. (Amended) A surface-mountable electrical circuit protection device comprising:

a first electrically insulative substrate having a first electrode disposed on a first surface thereof;

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a second electrically insulative substrate having a first end and a second end and a first electrode disposed on a first surface thereof and a second electrode disposed on a second surface thereof, the first electrode disposed on the first surface of the second substrate extends to one of the first or second end of the second substrate but not the other of the first or second end of the second substrate, the second electrode disposed on the second surface of the second substrate extends to one of the first or second end of the second substrate but not the other of the first or second end of the second substrate;

a third electrically insulative substrate having a first electrode disposed on a first surface thereof;

a first PTC element comprised of a polymer having conductive particles dispersed therein, the first PTC element interposed between the first and second substrates and electrically connecting the first electrode disposed on the first substrate with the first electrode disposed on the second substrate;

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a second PTC element comprised of a polymer having conductive particles dispersed therein, the second PTC element interposed between the second and third substrates and electrically connecting the second electrode disposed on the second substrate with the first electrode disposed on the third substrate;

a first conductive end termination wrapping around a first end of the device; and

a second conductive end termination wrapping around a second end of the device.

23 26. (Amended) A surface-mountable electrical circuit protection device comprising:

a first electrically insulating substrate having an electrode disposed on a first surface thereof;

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a second electrically insulating substrate having a first end and a second end and a first electrode disposed on a first surface thereof and a second electrode disposed on a second surface thereof, the first electrode disposed on the first surface of the second substrate extends to one of the first or second end of the second substrate but not the other of the first or second end of the second substrate and the second electrode disposed on the second surface of the second substrate extends to one of the first or second end of the of the second substrate but not the other of the first or second end of the second substrate;

a third electrically insulating substrate having a first electrode disposed on a first surface thereof and a second electrode disposed on a second surface thereof;

a fourth electrically insulating substrate having a first electrode disposed on a first surface thereof;

a first laminar PTC element comprised of a polymer having conductive particles dispersed therein, the first PTC element interposed between the first and second insulating substrates and electrically connecting the first electrode disposed on the first insulating substrate with the first electrode disposed on the second insulating substrate;

a second laminar PTC element comprised of a polymer having conductive particles dispersed therein, the second PTC element interposed between the second and third insulating

substrates and electrically connecting the second electrode disposed on the second insulating substrate with the first electrode disposed on the third insulating substrate;

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2 a third laminar PTC element comprised of a polymer having conductive particles dispersed therein, the third PTC element interposed between the third and fourth insulating substrates and electrically connecting the second electrode disposed on the third insulating substrate with the first electrode disposed on the fourth insulating substrate;

a first electrically conductive end termination wrapping around a first end of the device and electrically contacting the first electrode disposed on the fourth insulating substrate, the first electrode disposed on the third insulating substrate, and the first electrode disposed on the second substrate; and

a second electrically conductive end termination wrapping around a second end of the device and electrically contacting the second electrode disposed on the third insulating substrate, the second electrode disposed on the second insulating substrate, and the first electrode disposed on the first insulating substrate.

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Add Claims 38-42 to the present application:

30 38. A surface-mountable electrical circuit protection device comprising:

a first electrically insulating substrate having an electrode disposed on a first surface

24 thereof;

a second electrically insulating substrate having a first end and a second end and a first electrode disposed on a first surface thereof and a second electrode disposed on a second surface thereof, the first electrode disposed on the first surface of the second electrically insulating substrate extends to the first end but not the second end of the second electrically insulating substrate and the second electrode disposed on the second surface of the second electrically insulating substrate extends to the second end but not the first end of the second electrically insulating substrate;

a third electrically insulating substrate having a first electrode disposed on a first surface thereof and a second electrode disposed on a second surface thereof;

a fourth electrically insulating substrate having a first electrode disposed on a first surface thereof;

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a first laminar PTC element comprised of a polymer having conductive particles dispersed therein, the first PTC element interposed between the first and second electrically insulating substrates and electrically connecting the first electrode disposed on the first electrically insulating substrate with the first electrode disposed on the second electrically insulating substrate;

a second laminar PTC element comprised of a polymer having conductive particles dispersed therein, the second PTC element interposed between the second and third electrically insulating substrates and electrically connecting the second electrode disposed on the second electrically insulating substrate with the first electrode disposed on the third electrically insulating substrate;

a third laminar PTC element comprised of a polymer having conductive particles dispersed therein, the third PTC element interposed between the third and fourth electrically insulating substrates and electrically connecting the second electrode disposed on the third insulating substrate with the first electrode disposed on the fourth electrically insulating substrate;

a first electrically conductive end termination wrapping around a first end of the device and electrically contacting the first electrode disposed on the fourth electrically insulating substrate, the first electrode disposed on the third electrically insulating substrate, and the first electrode disposed on the second electrically insulating substrate; and

a second electrically conductive end termination wrapping around a second end of the device and electrically contacting the second electrode disposed on the third electrically insulating substrate, the second electrode disposed on the second electrically insulating substrate, and the first electrode disposed on the first electrically insulating substrate.

31<sup>30</sup>. The circuit protection device of Claim <sup>30</sup>~~38~~ wherein the third electrically insulating substrate has a first end and a second end, the first electrode disposed on the first surface of the third electrically insulating substrate extends to the first end but not the second end of the third electrically insulating substrate and the second electrode disposed on the second surface of the third electrically insulating substrate extends to the second end but not the first end of the third electrically insulating substrate.

32<sup>40</sup>. A surface-mountable electrical circuit protection device comprising:

a first electrically insulating substrate having an electrode disposed on a first surface thereof;

a second electrically insulating substrate having a first electrode disposed on a first surface thereof and a second electrode disposed on a second surface thereof;

a third electrically insulating substrate having a first end and a second end and a first electrode disposed on a first surface thereof and a second electrode disposed on a second surface thereof, the first electrode disposed on the first surface of the third electrically insulating substrate extends to the first end but not the second end of the third electrically insulating substrate and the second electrode disposed on the second surface of the third electrically insulating substrate extends to the second end but not the first end of the third electrically insulating substrate;

a fourth electrically insulating substrate having a first electrode disposed on a first surface thereof;

a first laminar PTC element comprised of a polymer having conductive particles dispersed therein, the first PTC element interposed between the first and second electrically insulating substrates and electrically connecting the first electrode disposed on the first electrically insulating substrate with the first electrode disposed on the second electrically insulating substrate;

a second laminar PTC element comprised of a polymer having conductive particles dispersed therein, the second PTC element interposed between the second and third electrically

insulating substrates and electrically connecting the second electrode disposed on the second electrically insulating substrate with the first electrode disposed on the third electrically insulating substrate;

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2 a third laminar PTC element comprised of a polymer having conductive particles dispersed therein, the third PTC element interposed between the third and fourth electrically insulating substrates and electrically connecting the second electrode disposed on the third electrically insulating substrate with the first electrode disposed on the fourth electrically insulating substrate;

a first electrically conductive end termination wrapping around a first end of the device and electrically contacting the first electrode disposed on the fourth electrically insulating substrate, the first electrode disposed on the third electrically insulating substrate, and the first electrode disposed on the second electrically insulating substrate; and

a second electrically conductive end termination wrapping around a second end of the device and electrically contacting the second electrode disposed on the third electrically insulating substrate, the second electrode disposed on the second electrically insulating substrate, and the first electrode disposed on the first electrically insulating substrate.

33 41. The circuit protection device of Claim <sup>32</sup>40 wherein the second electrically insulating substrate has a first end and a second end, the first electrode disposed on the first surface of the second electrically insulating substrate extends to the first end but not the second end of the second electrically insulating substrate and the second electrode disposed on the second surface of the second electrically insulating substrate extends to the second end but not the first end of the second electrically insulating substrate.

34 42. A surface-mountable electrical circuit protection device comprising:

a first electrically insulating substrate having an electrode disposed on a first surface thereof;

a second electrically insulating substrate having a first end and a second end and a first electrode disposed on a first surface thereof and a second electrode disposed on a second surface

thereof, the first electrode disposed on the first surface of the second electrically insulating substrate extends to the first end but not the second end of the second electrically insulating substrate and the second electrode disposed on the second surface of the second electrically insulating substrate extends to the second end but not the first end of the second electrically insulating substrate;

2 a third electrically insulating substrate having a first end and a second end and a first electrode disposed on a first surface thereof and a second electrode disposed on a second surface thereof, the first electrode disposed on the first surface of the third electrically insulating substrate extends to the first end but not the second end of the third electrically insulating substrate and the second electrode disposed on the second surface of the third electrically insulating substrate extends to the second end but not the first end of the third electrically insulating substrate;

a fourth electrically insulating substrate having a first electrode disposed on a first surface thereof;

a first laminar PTC element comprised of a polymer having conductive particles dispersed therein, the first PTC element interposed between the first and second electrically insulating substrates and electrically connecting the first electrode disposed on the first electrically insulating substrate with the first electrode disposed on the second electrically insulating substrate;

a second laminar PTC element comprised of a polymer having conductive particles dispersed therein, the second PTC element interposed between the second and third electrically insulating substrates and electrically connecting the second electrode disposed on the second electrically insulating substrate with the first electrode disposed on the third electrically insulating substrate;

a third laminar PTC element comprised of a polymer having conductive particles dispersed therein, the third PTC element interposed between the third and fourth electrically insulating substrates and electrically connecting the second electrode disposed on the third